

**Massachusetts Sustainable Forest Bio-Energy Initiative**  
Second Strategic Plan Advisory Committee Meeting  
Harvard Forest Fisher Museum (Petersham, MA)  
Thursday April 17<sup>th</sup>, 9:00—1:00  
Facilitator: Dr. Jonathan Raab, Raab Associates, Ltd.  
Consultant: Eric Kingsley, Innovative Natural Resource Solutions

**Meeting #2: Summary**

32 people attended the meeting, on Thursday that began at 9:00 and ended at 12:30

Documents Distributed Prior to Meeting:

Before the Meeting:

1. Agenda, April 17, 2008--*Raab Associates*
2. Massachusetts Biomass Strategic Plan—*Innovative Natural Resource Solutions*

To find any of the above documents, the presentations made at the meetings, or the technical reports use the following link:

<http://www.mass.gov/doer/programs/renew/bio-initiative.htm>

Introduction

The entire meeting was spent reviewing the draft strategic plan and garnering feedback from the Advisory Committee members. Goal, target, and chapter 4 were in full draft form; chapter 5 on recommendations was in first draft outline format, and chapters 2 and 3 in second draft. Comments are made by one or more Committee members and do not necessarily constitute a consensus unless noted. State or consultant clarification noted in [ ].

**Goal Statement**

- Mention jobs and economic benefits
- Mention sustainable markets and GHG

None of the Committee members disagreed with adding these thoughts to the Goal Statement.

**Target**

- Separate targets into two sentences (and two targets)—one focused on in-state markets, and the other focused on in-state harvesting
- Does this include non-forest biomass (e.g., waste wood pallets, agricultural by-products, etc.)?

- Be clear about what sustainable forest products include and what's excluded
- There's lots of non-sustainably produced biomass, e.g. utility line clearings. Should be "recycling" this wood.
- [Primary focus is on woody biomass from forest including residues, land clearing and sustainable forest biomass. Legislature addressing C&D issue, and not meant to include paper cubes. Cellulosic agricultural material also included. Can clarify]
- Does low emissions necessitate large generators? [Meant to be technology neutral.]
- Add "its communities and citizens" at the end of the Target.
- Mention small CHP specifically
- Can't really track targets like these today. Track use better than production (especially for out-of-state production). Will need to develop better tracking procedures and standards, and should add to recommendation section
- DEP Solid Waste Master Plan being revised and will should be mentioned in Introduction section along w/reference to C&D Task Force
- As far as DEP is concerned, "clean" is not a regulatory word and almost any feedstock can become "clean" depending on how it's used.
- Need to quantify what is meant by "managed sustainably". Wood market exists beyond MA, eg, do we want to require 3<sup>rd</sup> party certification?
- Need to provide clarity on characteristics of the fuel we are speaking about.
- Consider "financeable" concept as part of goal.

## **Chapter 5: Recommendation Section**

Rec. #1: Clarify on air emissions standards for gasification and thermal

- BACT includes cost-effectiveness standard that doesn't work too well, needs to be clearer. [Do have standards, and aren't able to just change them. About to do new standards for outdoor boilers. But 3-10 million BTU range tough as control technologies are expensive.]

Rec. #2: Streamline and clarify permitting process

- What's contemplated here by streamlining? [Not to forgo any processes or procedures but to make the process more clear, methodical, expeditious. Defer to larger siting streamlining process, but w/some specific biomass considerations.]
- Lower standard below 100 MW threshold to expedite process
- Opponents shouldn't be able to simply run the clock out on a project
- Existing 43-D process allows towns to run entire permitting process in 180 days, deemed approved if don't meet deadlines

Rec. #3 and #4: Provide financial support for thermal biomass applications (such as exists for electricity biomass applications)

- Supportive of thermal RPS but red flag to try and incorporate in electric RPS
- Support 3 and 4, but difficult to have thermal RPS as it's hard to monitor inputs and outputs like with electricity
- RPS or Renewable Energy Fund (REF) not right vehicle. Alternative Energy Portfolio standard or a dedicated thermal SBC would be better.
- REF already has lots of pressure
- Perhaps could use REF to capture heat portion of CHP and not just electricity side
- If we can use all the biomass in electricity (and biomass would be baseload generation), why create programs for biomass thermal? [We want to be use neutral and let market take care of best and highest use.]

Rec. #5: Plan and convene a biomass consortium

All thought this was a solid recommendation and no one suggested changes

Rec. #6: Replacement heating systems w/biomass

- State has “significant and meaningful influence” and should lead by example
- Why MEPA trigger? [Now w/ new GHG policy can make them look at biomass as alternative.]
- Add munis and schools in rural areas.
- State doesn't do great job helping local officials w/implementing newer technologies
- State has not yet decided carbon neutrality of biomass issue

Rec. #7: Promote and support Massachusetts forest industry

- Maintain sawmill sites as viable bio-energy locations (energy facilities or fuel aggregation/processing)
- Funds should be available for used equipment and not just new, although challenges with IRS
- Additional support needed for private landowners, since most land is private
- Certify % of input from sustainable sources
- Put a carbon tax on fossil fuels and give to landowners to maintain forests
- Need to capture the parcelization and fragmentation issue here, can link to EOEEA efforts on land conservation.
- Should state should get involved in supporting long-term contracts? Without long-term contracts, from a financing standpoint, there is a disconnect between short-term supply and long-term projects.
- Economic incentives should be tied to environmental benefits; growing and sustaining long-term should be rewarded (reward growing and not just harvesting)
- Something for suppliers similar to federal loan guarantees for early technology development would be helpful
- There's no futures market for biomass fuel like oil and gas
- Tradable tax should only be for facilities located in the Commonwealth

Rec. #8: States forests...

- Add another sub-recommendation that state should educate citizens about harvesting practices on state land (i.e., not over-harvesting, and thinning helps)
- Clarify whether anything we recommend here changes other state goals such as habitat.

Rec. #9: Public outreach on benefits of biomass as renewable energy

- Combine with rec. #5 to create a global outreach recommendation.
- Need a PR/political campaign—"why is wood good"
- Consider demonstration projects such as CHP
- Don't just focus on benefits, but benefits and costs—be balanced

## **Chapter 4: Background on Existing Tools, Policies, and Programs**

### State Purchasing

- Misleading that biomass is only source for meeting all targets [not intended]
- Add state target for GHG reductions which will address thermal as well.

### Biomass in Thermal Applications

- Clarify not much support for biomass thermal

### Greenhouse Gas and Attribute Market

- Add reference about pending Global Warming Solutions Act legislation

### Forest Cutting Practices Act

- MA law specifies what's "minimally" acceptable—even if most progressive in East.
- Last paragraph a bit editorial and rosy
- Practices don't address new information on silvaculture

### Third Party Certification

- Short section, considering how important this could become
- 3<sup>rd</sup> party certification goes above and beyond what's required by FCPA
- State should provide infrastructure for 3<sup>rd</sup> party certification on private land

## **Chapter 2: Benefits and Opportunities**

- Maybe move all of #1 on technologies to later or separate chapter. Start with cross-cutting benefits.
- Can achieve 90% efficiency with biomass thermal and CHP
- “Net carbon positive” is too strong under GHG reductions
- Who’s audience [public, for outreach and understanding, and policy makers, to move initiative forward]
- Add fuel “diversity” to consumer economic benefits
- Need context regarding benefits, “compared to what?” [Consider adding more context in chapter 1—displacing GHG from fossil fuels, sequestration vs. off-setting GHG, etc.]
- Displacing fossil fuel’s easy to explain, sequestration is not
- Explain habitat values

### **Chapter 3: Issues to be Addressed**

- Under #1 add biodiversity, soils, water...
- Under #4 (supply infrastructure) tied to ability to grow and harvest saw logs
- Under #4, need for forest conservation efforts to ensure long-term supply; need to explain the difference between a managed forest and unmanaged forest
- How do we capture woody biomass being wasted for energy
- Under #2 (criteria pollutants) should focus on wood burning vs. burning fossil fuels. Public health concerns w/wood smoke. MA doesn’t regulate wood stove emissions, but is on the line for non-attainment in valleys in western part of state

<b>MA Sustainable Forest Bioenergy Initiative Strategic Plan Expert Working Group</b>			
<b>Attendance</b>			
<b>Name</b>	<b>Organization</b>	<b>3.4.08</b>	<b>4.17.08</b>
Allison, Taber	MA Audubon		X
Bolgen, Nils	MA Technology Collaborative (MTC)	x	X
Boyce, Gordon	Dept of Conservation and Recreation (DCR)	x	X
Breger, Dwayne	Div of Energy Resources (DOER)	x	X
Cary, Charlie	Biomass Combustion Systems, Inc		X
Chilton, Steve	MA Development Finance Agency (MDFA)	x	X
Clapp, Jonathan	Suez Energy (PineTree)	x	X
Clark, Rob	USFS	x	
Crane, Dicken	MA Forest Landowners Association	x	
Damman, Jamie	North Country Procurement	x	X
Dammery, Dave	UMASS Resource Economics		
Graf, Kristen	Union of Concerned Scientists		X
Handley, Rick	CONEG	x	X
Hawes, Ellen	Environment Northeast		X
Henson, Mike	UMASS Timbr	x	X
Hull, Bill	Russell Biomass	x	X
Kelty, Matt	UMASS Forestry	x	
Kingsley, Eric	Innovative Natural Resources Solution	x	X
Labich, Bill	Wildlands and Woodlands Partnership	x	X
Leon, Warren	MA Technology Collaborative (MTC)	x	
Lusardi, Meg	Div of Energy Resources (DOER)	x	X
Lyons, Paul	Dept of Conservation and Recreation (DCR)	x	
Maker, Tim	BERC	x	
Malumphy, Pam	Housing and Econ. Development (EOHED)		
Manion, Michelle	NESCAUM	x	
Marx, Laura	Nature Conservancy	x	
McDiarmid, Jeremy	Environment Northeast	x	
Miller, Catherine	PVPC	x	X
Niebling, Charlie	New England Wood Pellet	x	X
Nylen, Nancy	Berkshire Renewable Energy Collaborative	x	
Ostrander, Jason	Congressman Olver's Office	x	
Palano, Gerry	Dept of Agricultural Resources (DAR)	x	X
Raab, Jonathan	Raab Associates	x	X
Recchia, Chris	BERC		
Reid, Sue	Conservation Law Foundation	x	X
Rizzo, Rob	Mount Wachusett Community College	x	X
Roberts, Lenny	Roberts Bros. Lumber	x	X
Scanlon, John	Dept of Fish and Game (DFG)	x	

Seidman, Nancy	MA DEP		X
Serre, Rhonda	MA Development Finance Agency (MDFA)		X
Smith, Joe	MA Wood Producers Association	x	X
Space, William	Dept of Environmental Protection (DEP)	x	X
Spencer, Bruce	Forest Guild	x	X
Terceiro, Ed	Mt. Wachusett Community College		
Timmons, Dave	UMASS Resource Economics		X
Urquhart, Ben	Dept of Conservation and Recreation (DCR)	x	X
Wetmore, Robert	Senator Wetmore	x	X
Wolfe, Matt	Tamarack Energy	x	X
Wood, Kristen	Congressman Olver's Office	x	